

Fanshawe College

## FIRST: Fanshawe Innovation, Research, Scholarship, Teaching

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Documentation (Approvals etc...)

Manufacturing Engineering Technology

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2018

### MEY4 Curriculum Modification for 2018-19

Fanshawe College

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cae\\_appliedscienceandtech\\_manufacturingengtechnology\\_documentation](https://first.fanshawec.ca/cae_appliedscienceandtech_manufacturingengtechnology_documentation)

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# CURRICULUM MODIFICATION REQUEST FORM

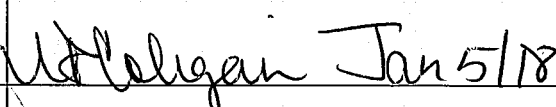
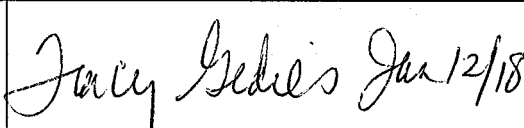
COURSE OR PROGRAM CURRICULUM "RATIONALE FOR CHANGE"

RECEIVED

JAN 05 2018

Program Requiring Changes

Office of the Registrar

Program Title: Manufacturing Engineering Technology		
Program Number: MEY4	Date Submitted: Click here to enter a date.	
Dean responsible for program: Vertha Coligan	Chair: Dave Machacek	
Credential Provided: <input type="checkbox"/> Declaration of Academic Achievement <input type="checkbox"/> Local Certificate <input type="checkbox"/> Ontario College Certificate <input type="checkbox"/> Diploma <input checked="" type="checkbox"/> Advanced Diploma <input type="checkbox"/> Grad Certificate <input type="checkbox"/> Degree <input type="checkbox"/> Apprenticeship		
Program Intakes: <input checked="" type="checkbox"/> F <input type="checkbox"/> W <input type="checkbox"/> S   Other:	Catalogue Year(s) Impacted: 2018/19	
Residency Requirement: <input checked="" type="checkbox"/> Met or <input type="checkbox"/> Not Met	Date of Last Program Review: 6/1/2015	
<div style="display: flex; justify-content: space-between;"> <span><i>I have read the reasons for the change and...</i></span> <span><i>Signature and date</i></span> </div>		
Dean of Faculty (Lead program):	<input checked="" type="checkbox"/> Approve <input type="checkbox"/> Do Not Approve	 Jan 5/18
Dean of Faculty (Affiliate program-impacted by change):	<input type="checkbox"/> Approve <input type="checkbox"/> Do Not Approve	
Dean of Faculty (Affiliate program-impacted by change):	<input type="checkbox"/> Approve <input type="checkbox"/> Do Not Approve	
Senior Vice President Academic (required for major changes and late DAs):	<input type="checkbox"/> Approve <input type="checkbox"/> Do Not Approve	
Director, Centre for Academic Excellence:	<input checked="" type="checkbox"/> Supports <input type="checkbox"/> Does Not Support	 Jan 12/18
Office of the Registrar:	<input type="checkbox"/> Supports <input type="checkbox"/> Does Not Support	
Notes:		

*Please answer each of the questions below, if applicable. Missing or incomplete information may delay review of the proposed changes.*

**1.0 Describe proposed change(s). Complete Appendix A (if necessary) and amend SDAR (Refer to Appendix C).**

MECH-3039 moves to level 5 and METH-3024 moves to level 6

**2.0 Reason/Rationale for Changes**

**2.1 The reason for the change is based on:**

- ☐ A recent program review
- ☐ Program Advisory Committee feedback
- ☒ Student feedback
- ☐ KPI results
- ☐ Accreditation or other regulatory requirements
- ☐ Shared curriculum
- ☒ Trends in the field/industry
- ☐ Other (please describe):

**2.2 Does the change support the College's Strategic Framework (mission, vision, values)?**

- ☒ Yes
- ☐ No (If no, please explain)

**2.3 What strategic goal(s) does the proposed change support?**

- ☒ Goal 1 - Enhance innovative practices for exceptional student learning
- ☐ Goal 2 - Manage enrolment growth
- ☐ Goal 3 - Optimize use of resources
- ☐ Goal 4 - Build sustainable sources of alternative revenue

**3.0 Students**

**3.1 Will the change affect the cost of the program for students?**

- ☐ Yes
- ☒ No

**3.2 If yes, there will be an additional cost for:**

- ☐ Materials (Include details):
- ☐ Equipment (Include details):
- ☐ Other (Please describe):

#### 4.0 Program Learning Outcomes

4.1 Will the proposed change meet the Program Vocational Learning Outcomes? (Complete Appendix B and mark the changes in the mapping [e.g. red font])

☒ Yes

☐ No

4.2 Are there any implications related to progression because of pre-requisite courses (and/or co-requisite courses)?

☒ No

☐ Yes (If yes, please explain)

#### 5.0 Relationships with Other Programs

5.1 Are any of the courses impacted by the change provided by another School (e.g., SLLS, LKSB) and/or delivered at another campus?

☒ No

☐ Yes

5.2 What Schools/Campuses will be impacted by the proposed change?

- ☐ Lawrence Kinlin School of Business
- ☐ School of Information Technology
- ☐ School of Tourism, Hospitality and Culinary Arts
- ☐ School of Community Studies
- ☐ School of Health Sciences
- ☐ School of Nursing
- ☐ School of Public Safety
- ☐ School of Contemporary Media
- ☐ School of Design
- ☐ School of Language and Liberal Studies
- ☐ Donald J. Smith School of Building Technology
- ☐ Norton Wolf School of Aviation Technology
- ☐ School of Applied Sciences and Technology
- ☐ School of Transportation Technology and Apprenticeship
- ☐ Continuing Education
- ☐ Simcoe/Norfolk Regional Campus
- ☐ St Thomas/Elgin Regional Campus
- ☐ Woodstock/Oxford Regional Campus
- ☐ Huron/Bruce Regional Sites

- 5.3 Will the change affect pathway agreements (e.g., bridging, articulations, laddering, advanced standing) with other Fanshawe program(s) and/or other institution(s)?  
(Refer to the pathway agreements listed here: <http://transferagreements.fanshawec.ca/>)

☒ No

☐ Yes (If yes, indicate when you will notify the other Fanshawe program(s) and/or other institution(s) and the Pathways Coordinator in the Centre for Academic Excellence of the change)

- 5.4 If this program is a Co-Operative Education program, will the proposed change impact Co-op?

☒ No

☐ Yes (If yes, consult with the Co-op office prior to submission)

## 6.0 Resource Implications of Proposed Changes

- 6.1 Will the proposed change have staffing implications?

☒ No

☐ Yes (If yes, please explain)

- 6.2 Will the proposed change impact any of the Enabling areas?

☒ No

☐ Yes (If yes, please explain)

- 6.3 Will the proposed change affect space and/or technology requirements?

☒ No

☐ Yes (If yes, please explain)

## 7.0 General College Requirements

- 7.1 Are changes consistent with Colleges policies?

☒ Yes

☐ No (If no, please explain)

- 7.2 Will the program meet the General Education requirements (Policy 2-B-02) as listed below?

☐ No

☒ Yes

<b>Local Certificate, Ontario College Certificate and Graduate Certificate</b> - none required)	<b>Diploma</b> - 3 required (minimum of 1 must be an elective)	<b>Advanced Diploma</b> - 4 required (minimum of 2 must be electives)
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- 7.3 Will the program have 25% distinct curriculum to meet the Residency Requirement of 25% credit units? Consider all pathway agreements (e.g., bridging, internal articulations, laddering, advanced standing) with other Fanshawe programs and/or other institutions.

☐ No

☒ Yes

**Note:** In accordance with POLICY NUMBER: 2-B-17 Graduation from Approved College Programs

...to be eligible for any College Credential a student must be enrolled and complete at least 25% of that program's credit units at Fanshawe College, unless stipulated differently by other approving bodies such as the Postsecondary Education Quality Assessment Board (PEQAB).

7.4 Indicate:

- i) Total program hours before proposed change: 2055
- ii) Total program hours after proposed change: 2055
- iii) Level(s) in which the proposed change(s) occurs: level 1 and level 2

7.4.1 Are the total program hours consistent with the requirements as listed below?

☒ Yes

☐ No (If no, please explain)

<b>Local Certificate</b> - 300 hours	<b>Ontario College Certificate</b> - 600 hours
<b>Diploma</b> - 1200 to 1400 hours	<b>Advanced Diploma</b> - 1800 to 2100 hours
<b>Graduate Certificate</b> - 600 hours	

APPENDIX A: PROPOSED CURRICULUM MODIFICATION

Course Code	Existing DA Courses	Total Hours	Total Credits	Course Code	Proposed DA Courses	Total Hours	Total Credits	
Level 1								
TOTAL		345	19.5	TOTAL		345	19.5	
Level 2								
TOTAL		345	19.5	TOTAL		345	19.5	
Level 3								
TOTAL		345	18.5	TOTAL		345	18.5	
Level 4								
TOTAL		345	16	TOTAL		345	16	
Level 5								
MGMT-3072	Production Planning & Inventory Control	45	3	MGMT-3072	Production Planning & Inventory Control	45	3	
MANF-5003	Automation Programming & Control-Adv.	45	2	MANF-5003	Automation Programming & Control-Adv.	45	2	
MGMT-3075	Capstone 1 Manufacturing Technology	30	2	MGMT-3075	Capstone 1 Manufacturing Technology	30	2	
COMP-3100	Computer Applications	30	1.5	COMP-3100	Computer Applications	30	1.5	
METH-5019	Quality Assurance 3	60	4	METH-5019	Quality Assurance 3	60	4	
METH-3024	Facilities Planning	60	4	Switch courses between level 5 & level 6	MECH-3039	Statics & Strengths of Mterials	60	4
TOTAL		345	16.5	TOTAL		345	16.5	
Level 6								
GEN ED		45	3	GEN ED		45	3	
MGMT-5077	Capstone 2 Manufacturing Technology	45	3	MGMT-5077	Capstone 2 Manufacturing Technology	45	3	
MECH-3039	Statics & Strengths of Materials	60	4	Switch courses between level 5 & level 6	METH-3024	Facilities Planning	60	4
MGMT-3073	Operations Management	60	4	MGMT-3073	Operations Management	60	4	
MECH-3018	Quality Systems	45	3	MECH-3018	Quality Systems	45	3	
ENGR-5013	Applied Engineering Principles	75	4	ENGR-5013	Applied Engineering Principles	75	4	
TOTAL		330	21	TOTAL		330	21	

PROGRAM TOTAL 2055 111

PROGRAM TOTAL 2055 111

## Degree Audit Report

Catalog: 2018/2019

Program: MEY4

Name: Manufacturing Engineering Technology

Department: MAN - Applied Science and Technology

Academic Level: PS

CCD: 9 - 6AcadSem/1800-2100hrs

Credential: Ontario College Advanced Dipl

Grade Scheme: LG2

Major: MEY4 - Manufacturing Eng Technology

Div: MAN - Manufacturing Sciences Division

Co-Op Indicator: N/A

## Academic Program Requirement

Total Credits: 118.00

Residency Reqmt: 30.00

GPA Requirement: 2.00

Residency Reqmt GPA: 2.00

Minimum Grade: D

## Academic Requirement: MEY4.18 Manufacturing Engineering Technology

Major: MEY4

Grade Scheme: LG2

Minimum GPA: 2.00

Minimum Grade:

## Subrequirement: Level 1

Take all of the following Mandatory Courses:

		Total Hours	Total Credits	GE
WRIT-1039	Reason & Writing 1-Technology	45.00	3.00	
LAWS-1038	Law, Ethics & Occupational H&S	45.00	3.00	**
ENGR-1024	Engineering Graphics	75.00	3.50	
MATH-1185	Math 1	90.00	6.00	
MACH-1154	Machining 1	45.00	2.00	
WELD-1054	Welding	45.00	2.00	

## Subrequirement: Level 2

Take all of the following Mandatory Courses:

		Total Hours	Total Credits	GE
PSYC-1027	Human Relations	45.00	3.00	**
MACH-3056	Machining 2/Intro to CNC Processes	75.00	3.50	
MATH-1186	Engineering Fundamentals	60.00	4.00	
MATS-1026	Materials Engineering	45.00	2.50	
ENGR-1025	Engineering Design 1	45.00	2.50	
METH-1044	Quality Assurance 1	75.00	4.00	

## Subrequirement: Level 3

Take all of the following Mandatory Courses:

		Total Hours	Total Credits	GE
MGMT-1007	Project Management	45.00	3.00	**
MECH-1104	Robotics & Automation Fundamentals	45.00	2.50	
ENGR-3015	Engineering Design 2	60.00	3.50	
METH-3023	Quality Assurance 2	60.00	3.00	
ELEC-1127	Electrical Devices & Instrumentation	60.00	3.00	
MACH-3057	CNC Applications & Intro to CAD/CAM	75.00	3.50	

## Subrequirement: Level 4



## Degree Audit Report

Gen Ed - Take a 3 credit General Education elective course Take all of the following Mandatory Courses:

		Total Hours	Total Credits	GE
CADD-3032	CAD/CAM Apps & Automated Processes	75.00	3.50	
ENGR-5012	Engineering Design 3	45.00	2.50	
MECH-3038	Fluid Power Machine Control	60.00	3.00	
MGMT-3074	Capstone Project Technician	30.00	2.00	
COMM-3069	Technical Communication for Technicians	45.00	3.00	
WELD-5007	Manufacturing Processes & Welding-Adv	45.00	2.00	

## Subrequirement: Level 5

Take all of the following Mandatory Courses:

		Total Hours	Total Credits	GE
MGMT-3072	Production Planning & Inventory Control	45.00	3.00	
MANF-5003	Automation Programming & Control-Adv	45.00	2.00	
MGMT-3075	Capstone 1 Manufacturing Technology	30.00	2.00	
COMP-3100	Computer Applications	30.00	1.50	
METH-5019	Quality Assurance 3	60.00	4.00	
METH-3024	Facilities-Planning	60.00	4.00	Remove
MANF-5004	Materials & Processes- Adv	75.00	4.00	
MECH-3039	Statics & Strengths of Materials	60.00	4.00	Add

## Subrequirement: Level 6

Gen Ed - Take a 3 credit General Education elective course Take all of the following Mandatory Courses:


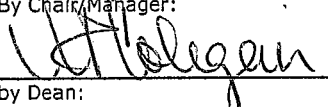
		Total Hours	Total Credits	GE
MGMT-5077	Capstone 2 Manufacturing Technology	45.00	3.00	
MECH-3039	Statics & Strengths of Materials	60.00	4.00	Remove
MGMT-3073	Operations Management	60.00	4.00	
MECH-3018	Quality Systems	45.00	3.00	
ENGR-5013	Applied Engineering Principles	75.00	4.00	
META-3024	Facilities Planning	60.00	4.00	Add

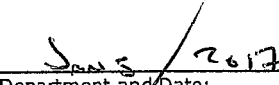
## Subrequirement: Gen Ed - Electives

Take 6 General Education Credits - Normally taken in Levels 4 and 6

## Subrequirement: Program Residency

Students must complete a minimum of 30 credits in this program at Fanshawe College to meet the Program Residency requirement and graduate from this program

Approved By Chair/Manager:  
  
 Approved By Dean:  


Department and Date:  
  
 Date:  
 Jan 5/18

General Education Approved By(as appropriate):

Date:

TJ  
 Jan 12/18